

REMARKS

Reconsideration and Allowance are respectfully requested in view of the foregoing amendments and the following remarks.

Claims 1-37 are pending.

Claims 1, 8, 12, 20, 25, and 29 have been amended. Claim 8 was amended for a typographical correction.

Claims 35-37 are newly added.

Regarding the § 112 Rejection

Claim 25 was rejected under 35 USC § 112, first paragraph, for failing to comply with the enablement requirement. Applicant has amended claim 25 by deleting the language indicated by the Examiner.

Furthermore, Applicant respectfully submits that the deleted claim language is supported in the originally filed specification at pg. 7, lines 12-16. Regardless, Applicant has amended the claim, thereby broadening its scope and overcoming the § 112 rejection. Applicant respectfully requests that this § 112 rejection be withdrawn.

Regarding to § 102 Rejection

Claims 1-4, 11-14, 18-23, 29, 20, and 34 were rejected under 35 USC § 102(b) for being anticipated by Wong et al (U.S. Patent No. 5,940,442). Applicant would agree that Wong teaches a high speed data receiver, but Wong specifically requires that the incoming data signal 101, after being coupled with the adaptive equalizer 102, where it is amplified with a signal gain, is provided through four peak trackers 104a, 104b, 104c, 104d. This is important because "each peak tracker 104 samples the equalized data signal 103/151b by capturing its peak amplitude

within a predetermined time period, or window. (See col. 3, lines 22-53) Furthermore, the language cited by the Examiner at col. 2, lines 47-54 neglects to include the important sentence at the end of that passage from lines 54-57 indicating that the data sample feedback signals represents a summation of weighted averages of pluralities of positive amplitude peaks and negative amplitude peaks of the data signal. As such, Applicant respectfully submits that Wong is limited to teaching a plurality of peak detectors circuits that detect negative amplitude peaks or positive amplitude peaks during a predetermined period or window of time. Wong does use comparator circuits elsewhere in Figure 1 as elements 112a, 112b, 112c, as well as elements 122a and 122b. If Wong had wanted elements 104a - 104d to be comparators it would have specifically stated or taught as such. Instead, Wong specifically teaches the use of peak detectors for detecting peaks within specific windows or periods of time. Wong does not teach or anticipate "a plurality of decision circuits, each decision circuit comprising a comparator circuit." Nor does it teach a plurality of decision circuits wherein each decision circuit generates "an output signal corresponding to the state of said digital signal." Applicant further submits that a peak detector that provides a peak within a period of time or window is very different from a comparator circuit that provides the state of a signal. In particular, a comparator circuit will provide an output based on whether the input signal is above or below a particular voltage at a particular time. A peak detector circuit will only detect and output the peak voltage, whether positive or negative, within the period of time designated in Wong.

With respect to claim 1, this claim has been amended to recite a plurality of decision circuits, each decision circuit "comprising a comparator circuit...and generating an output signal corresponding to the state of said digital signal." Applicant respectfully submits that Wong does not teach, allude to or anticipate the use of a comparator circuit within a decision circuit as

recited in claim 1. As such, Applicant respectfully requests that this § 102 rejection be withdrawn and submits that claim 1 is ready for allowance.

Claims 2-4 and 11 are each dependent upon claim 1 and are therefore not anticipated for at least the same reasons as discussed above with respect to claim 1. Applicant respectfully submits that these claims are ready for allowance.

With respect to claim 12, this method claim has been amended to recite "providing a plurality of comparator circuits each responsive to a different clock signal; sampling a digital signal appearing at an end point of a communications channel with the comparator circuits to generate a plurality of sampled signals." Applicant respectfully submits that Wong does not teach or anticipate the use of such comparator circuits and in fact teaches away from the use of a comparator circuit by requiring a peak detector for detecting positive and negative peaks within a window or time period. As such, Applicant respectfully submits that claim 12 is not taught or anticipated by Wong and respectfully requests that this § 102 rejection be withdrawn.

Claims 13, 14, and 18-19 are each dependent upon claim 12 and are therefore not anticipated for at least the same reasons as discussed above with respect to claim 12. Applicant respectfully requests that the § 102 rejection be withdrawn.

Regarding claim 20, this claim has been amended to recite that there are "a plurality of decision circuits each comprising a comparator circuit, the comparator circuits each responsive to a different clock signal, the decision circuits providing decision signals corresponding to a state of said content." This, of course, is completely supported by the original filed specification at pg. 6 in at least lines 6 and 7. Applicant respectfully submits that Wong does not anticipate claim 20 because Wong specifically requires the use of peak detectors for capturing the signal's peak amplitude within a predetermined time period or window. Applicant respectfully submits

that claim 20, as amended, is ready for allowance and requests that the § 102 rejection be withdrawn.

Claims 21, 22 and 23 are reach dependent upon claim 20 and are therefore not anticipated for at least the same reasons as discussed above with respect to claim 20. Applicant respectfully requests the § 102 rejection be withdrawn and submits that these claims are ready for allowance.

Regarding claim 29, this claim has been amended to recite a "comparator means for sampling a digital signal appearing at an end point of a communications channel so as to generate a plurality of sampled signals." Since Wong does not anticipate the use of a comparator means, but instead teaches and requires a peak detector that captures a signal's peak by capturing its peak amplitude within a predetermined time period or window period, then Wong does not anticipate the presently amended claim 29. As such, Applicant respectfully requests that this § 102 rejection be withdrawn and submits that claim 29 is ready for allowance.

Claims 30 and 34 are reach directly dependent upon claim 29 and are therefore not anticipated for at least the same reasons as stated above with respect to claim 29. Applicant respectfully requests that this § 102 rejection be withdrawn and submits that these claims are ready for allowance.

Regarding the § 103 Rejection

Claim 24 was rejected under 35 USC § 103(a) for being rendered obvious by Wong et al. Applicant submits that claim 24 is dependent upon claim 20, which recites, among other things, "a plurality of comparator decision circuits." As discussed above with respect to the 102 rejection, Applicant respectfully submits that Wong does not teach, allude to, anticipate, or render obvious the use of a comparator circuit as recited. Furthermore, Applicant respectfully

submits that the Examiner has not provided requisite support to motivate one of ordinary skill in the art to modify Wong et al to include a voltage-to-current converter for the reason discussed in the present Office Action. For these reasons, Applicant respectfully requests that this § 103 rejection be withdrawn and submits that claim 24 is ready for allowance.

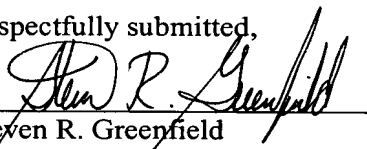
Regarding the Allowable Subject Matter

Applicant appreciates the Examiner's indicate that claims 5-10, 15-17, 26-28, and 31-33 are objected to as being dependent upon rejected base claims and would be allowable if rewritten in independent form, including all the limitations of the base claim and any intervening claims. As such, Applicant has added new claims 35, 36, and 37. In particular, claims 35 is a combination of allowable claim 5 rewritten in independent form to include all the limitations of independent claim 1. New claim 36 is allowable claim 8 rewritten in independent claim form including all the limitations of base claim 1. And, new claim 37 is allowable claim 10 rewritten in independent form, including all the limitations of the base claim 1. Applicant respectfully submits that new claims 35, 36, and 37 are ready for allowance.

In view of the above amendments, Applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

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